

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A reader/writer antenna which is used ~~for an RFID~~ with a Radio Frequency Identification (RFID) system for non-contacting data communication ~~wherein comprising:~~

~~a plain soft magnetic member [[is]] configured to be disposed on a surface; for disposing an object of the an antenna coil which is formed by at least one turn and disposed on the soft magnetic member; and a conductive member disposed on said soft magnetic member on an opposite side of a placement of the antenna coil.~~

Claim 2 (Currently Amended): A reader/writer antenna ~~according to claim 1 wherein the antenna coil is wound in which is used for an RFID system for non-contacting data communication wherein a plain soft magnetic member is disposed on a surface for disposing an object of the antenna coil which is formed by winding the plain soft magnetic member in a spiral manner.~~

Claim 3 (Currently Amended): A reader/writer antenna according to Claim 1 [[or 2]] wherein: the soft magnetic member is formed ~~so as to overlap~~ ~~contact~~ a part of ~~an antenna coil surface defined planarly by the one turn of the antenna coil in an orthogonal view toward an antenna surface of the antenna coil; and so that~~ a magnetic flux which is generated by the antenna coil is formed asymmetrically with reference to a center axis of the antenna coil.

Claim 4 (Currently Amended): A reader/writer antenna which is used ~~for an RFID~~ with a Radio Frequency Identification (RFID) system for non-contacting data communication wherein the comprising:

an antenna coil [[is]] formed such that a top surface and a ~~back~~ bottom surface of  
[[the]] a plain plate is wound around a magnetic core which has the antenna coil wound  
around top and bottom surfaces of the core, wherein said core is formed by a soft magnetic  
member.

Claim 5 (Currently Amended): A reader/writer antenna which is used ~~for an RFID~~ with a Radio Frequency Identification (RFID) system for non-contacting data communication wherein the comprising:

an antenna coil [[is]] formed such that a circumferential surface of a column formed  
by the antenna coil is wound around a columnar magnetic core which is formed by a soft  
magnetic member.

Claim 6 (Currently Amended): A reader/writer antenna according to Claim 4 or 5 wherein [[a]] the soft magnetic plain member is a plate [[is]] configured to be disposed on a surface for disposing an object for the antenna coil.

Claim 7 (Currently Amended): A reader/writer antenna according to any one of Claims [[1 to 6]] 4 or 5 wherein a thickness of [[a]] the soft magnetic member or a thickness of a plain the plate magnetic core is set to be 10 mm or thinner.

Claim 8 (Currently Amended): ~~A reader/writer antenna according to Claim 1 A~~  
reader/writer antenna which is used with a Radio Frequency Identification (RFID) system for  
non-contacting data communication comprising:

a soft magnetic member configured to be disposed on a surface;  
an antenna coil which is formed by at least one turn and is disposed on the soft  
magnetic member;

wherein a thickness  $[[T]]$   $t$  for  $[[a]]$  the soft magnetic member or a magnetic core for  
the plain forming a plate satisfies a relationship  $S/L > t > S/(L/\mu)$  under condition that  $S$   
indicates an area for the antenna coil,  $L$  indicates a circumferential length of the antenna coil,  
and  $\mu$  indicates a magnetic transmittance ratio of the soft magnetic member or the magnetic  
core.

Claim 9 (Currently Amended): A reader/writer antenna according to Claim 1 wherein  
the soft magnetic member is a compound of either a metal powder powder, a flake or a ferrite  
powder powder, which are formed by flattening a metal powder.

Claim 10 (Currently Amended): ~~A reader/writer antenna according to Claim 9 which~~  
is used with a Radio Frequency Identification (RFID) system for non-contacting data  
communication comprising:

a soft magnetic member configured to be disposed on a surface;  
an antenna coil which is formed by at least one turn and disposed on the soft magnetic  
member;  
wherein the soft magnetic member is a compound of either a metal powder, a flake or  
a ferrite powder, which are formed by flattening a metal powder;

wherein the metal ~~power~~ powder is either one of a carbonyl iron powder, a reduced iron powder, an atomized ~~power~~ powder, or an amorphous powder.

Claim 11 (Currently Amended): A reader/writer antenna ~~according to Claim 9 which~~ is used with a Radio Frequency Identification (RFID) system for non-contacting data communication comprising:

a soft magnetic member configured to be disposed on a surface;  
an antenna coil which is formed by at least one turn and disposed on the soft magnetic member;

wherein the soft magnetic member is a compound of either a metal powder, a flake or a ferrite powder, which are formed by flattening a metal powder;

wherein the metal ~~power~~ powder or the flake is a flake which is made by flattening a water-atomized iron base alloy or an iron base alloy ~~power~~ powder mechanically.

Claim 12 (Original): A reader/writer antenna according to Claim 11 wherein the iron base alloy contains 6 w% to 15 w% of silicon.

Claim 13 (Original): A reader/writer antenna according to Claim 11 wherein the iron base alloy contains at least approximately 1 w% of aluminum or lower, approximately 3 w% of nickel or copper lower, approximately 5 w% of chromium or lower, approximately 10 w% of cobalt or lower in addition to approximately 6 w% to 15 w% of silicon.

Claim 14 (Currently Amended): A reader/writer antenna ~~according to Claim 9 which~~ is used with a Radio Frequency Identification (RFID) system for non-contacting data communication comprising:

a soft magnetic member configured to be disposed on a surface;  
an antenna coil which is formed by at least one turn and disposed on the soft magnetic  
member;

wherein the soft magnetic member is a compound of either a metal powder, a flake or  
a ferrite powder, which are formed by flattening a metal powder;

wherein the compound is an injection molded member, a compressed molded member, a rolled stripped member, or a member to which a painting member is applied.

Claim 15 (Currently Amended): The soft magnetic member according to any of  
Claims 1-5 is either one of an amorphous alloy, a permalloy, a magnetic steel, a silicon steel, a sendust alloy, a Fe-AL alloy, or a soft magnetic ferrite.

Claim 16 (Currently Amended): A reader/writer antenna according to Claim 1  
wherein the soft magnetic member is an amorphous film or a layered member of [[the]] an  
amorphous film.

Claim 17 (Currently Amended): A reader/writer antenna according to Claim 1 A  
reader/writer antenna which is used with a Radio Frequency Identification (RFID) system for  
non-contacting data communication comprising:

a soft magnetic member configured to be disposed on a surface of an object;  
an antenna coil which is formed by at least one turn and is disposed on the soft  
magnetic member;

wherein a non-magnetic conductive member of which initial resistance is approximately  $10 \times 10^{-8} \Omega \text{m}$  or lower or a conductive member of which initial resistance is

approximately  $3 \times 10^{-8} \Omega \text{ m}$  is configured to be disposed between the soft magnetic member and the object.

Claim 18 (Currently Amended): ~~A reader/writer antenna according to Claim 1 A reader/writer antenna which is used with a Radio Frequency Identification (RFID) system for non-contacting data communication comprising:~~

a soft magnetic member configured to be disposed on a surface of an object;  
an antenna coil which is formed by at least one turn and is disposed on the soft magnetic member;

wherein a non-magnetic conductive member which has a  $0.015 \Omega$  resistance which is more preferably  $0.005 \Omega$  or lower with 1 cm length, 1 cm width is configured to be disposed between the soft magnetic member and the object.

Claim 19 (Currently Amended): A reader/writer antenna according to Claim 1 wherein [[the]] an object with said reader/writer antenna affixed thereon is a metal member or a member which contains a metal member.

Claim 20 (Currently Amended): A reader/writer wherein the reader/writer antenna according to any one of Claims ~~1 to 19~~ 1-5, 8-14, and 16-19 is configured to be disposed so as to contact a casing which is formed by a non-magnetic member which has an initial resistance of approximately  $10 \times 10 \Omega \text{ m}$  or lower.

Claim 21 (Currently Amended): A reader/writer antenna ~~according to Claim 2~~ wherein the which is used with a Radio Frequency Identification (RFID) system for non-contacting data communication comprising:

a soft magnetic member configured to be disposed on a surface;  
an antenna coil which is formed by at least one turn and disposed on the soft magnetic  
member;  
wherein the antenna coil is wound in a spiral manner, and said antenna is configured  
to be disposed so as to contact a casing [[is]] made of a conductive member which has 0.015  
 $\Omega$ , more preferably 0.005  $\Omega$  or lower resistance.